Graphene-based Saturable Absorber, Its Use And A Method of Manufacturing Thereof

TECHNOLOGY #P18011

Category

Electronic Devices and System

Solution

Higher sensitivity, consistent repeatability, and precise saturable absorber laser are all features of our invention.

Technology & Applications

The present invention provides a method for manufacturing graphene-based saturable absorber comprising steps of preparing graphene-polymer nanocomposite through liquid phase exfoliation; fabricating of adiabatic microfiber ;identifying transmission loss in the adiabatic microfiber; depositing graphene and polydimethylsiloxane nanocomposite on adiabatic microfiber; packaging of deposited microfiber as a graphene-based saturable absorber; and analyzing and testing of the graphene-based saturable absorber.

Advantages

The developed PoC Graphene-based saturable absorber for ultrashort pulse fiber lasers passed the sensitivity, repeatability and accuracy test.

Intellectual Property

Patent: PI2020003646

Inventors

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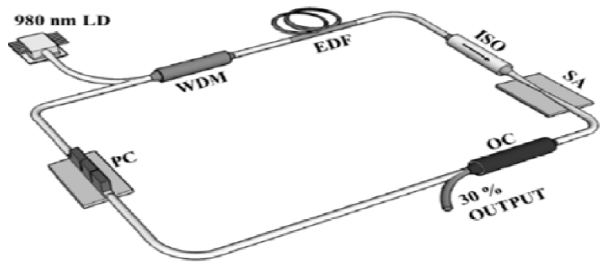
Gallery



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